

Analysis of a Group Decision-Making Process

Gabriela GHEORGHE

ggheorghe@ugal.ro

Dunarea de Jos University of Galati

Abstract

The aim of this paper is to highlight the role of group decision and group thinking in the organization of a firm, taking as reference theoretical models and their practical applications. Organizational goals are often blocked by a pattern of thinking that develops within organizations. The article will also underline the importance of organizations' focusing on sub-goals, in order to reach, finally, to the desired result in the main goals of the organization.

Keywords: group decision, teamthinking, groupthinking, decision tree.

JEL Code: D23

1. Introduction

Decision taking is supposed to be equivalent with problem solving. Nevertheless, some decisional situations can't be structured as data of a problem, and this is the case we have taken into account in order to describe the general outline of a rational decision pattern. There are different types of rational patterns and number of steps involved, and even these steps vary in different patterns.

2. Steps in a rational decision taking pattern^[58]

1. Defining the decisional situation or the decision that needs to be taken
2. Identifying the most important criteria for the process and the final results
3. Analysing all the possible solutions
4. Estimating the consequences of these solutions and the possibility of satisfying the stated criteria
5. Choosing the best options

The stages of the decisional process are presented in the following diagram:

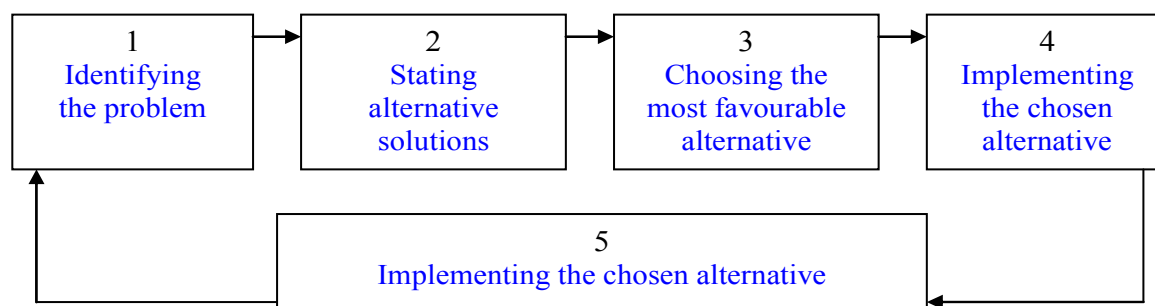


Figure 1. Stages of the decisional process ^[59]

Rational decision-taking patterns imply a cognitive process in which every step derives logically from the previous one. It is a process based on weighing the alternatives in order to achieve the best potential result.

⁵⁸ <http://www.decision-making-confidence.com/rational-decision-making-models.html>

⁵⁹ Deaconu, A.; Podgoreanu, S.; Rasca, L. *Factorul uman si performantele organizatiei, Cap. V*

The comparison is often obtained by filling matrix type forms or charts, or decisional grids, selection matrix, by evaluating criteria and attributing a relative importance for each criterion. The options are evaluated according to criteria and the higher value one "wins".

3. Decision problem

An important company in the IT services had to analyze and decide which would be the best organizational structure to support the doubling of the number of customers and projects each year, at a moment when the Service department manager, one of the key employees, resigned. The main alternatives that could immediately be identified were:

- i. To convince the current Service manager to remain.
- ii. To find or promote another person in his place.
- iii. To split the consultancy department into two teams: one for the implementation and another one for the maintenance and post implementation services and to assign a different manager for each team.

During the management meeting, each manager had a different opinion of how to solve that issue. So, a decision group was formed in order to take the best choice. For that, the CEO assigned three cross functional teams of managers to analyze each alternative and to present a written report with the advantages and disadvantages of their approach, the critical conditions to be taken into consideration and a detailed plan including tasks, resources, responsibilities and due dates.

i. Avoiding the loss of the Consultancy Services department manager

Risks:

- the risk of losing customers in the context of strong IT services competitiveness
- the risk of a person trained by the company offering his know-how to a rival firm, as the confidentiality clause can't fully cover this risk
- the organization could lose its access to critical information and knowledge concerning its activity, projects, clients

Arguments pro: his work contributes significantly to the performance of the other employees; he strongly identifies with the company values and objectives. Approaches, solutions: identification of causes, reasons of his resignation; - solving the problems that made him resign; - negotiating possible incentives, bonuses or additional compensations.

Conclusions:

Following these measures, the resigning manager accepts to continue his activity until a solution is found, but categorically refuses to reconsider his decision

ii. Difficulty in finding a substitute

Risks:

- there is the risk of not finding the right person on such short notice, taking into account the difficulty of finding a specialist with experience in the field, and such a person would need to be formed and integrated in the company discipline
- even if a specialist from within the company is promoted, there is the possibility of him not showing the managerial skills needed by the position, as the the resigning manager's main reasons for ceasing his activity in the company were the low results recorded lately in the department, due mainly to the impossibility of dealing with the increased volume of activity

Approaches, solutions:

Auditing the department's activity and identifying the causes of the lack of resources that affects the department's efficiency

Conclusions: the department needs reorganizing both because of replacing the manager and in order to make the activity efficient

iii. Department division

The allocation of resources in the context of increased need of resources both for programming, consultancy and technical assistance and maintenance/service (the lack of resources becoming critical due to quantitative and qualitative increased demands), became a challenge and a major cause of disfunctionality in the Service department.

The auditing report concerning the activity of the consultancy service department revealed the following aspects:

- resources simultaneously allocated to more projects, case in which the work procedure needs to be updated, the tasks need to be solved according to their degree of priority (critical, urgent, normal)
- resources allocated to redoing a task, due to incomplete specifications or particular features undetected in the analysis stage

The conclusion of the report in order to avoid the squandering of resources: in the case of complex modifications of a module's functionalities or for the devising of new reports and customizations on the customers' specific activity it is necessary to draw detailed documents with the technical requirements and specifications signed by both parties after estimating the necessary effort. In order to make resource allocation more efficient it was necessary to separate the implementation activity from the post-implementation and maintenance activity.

For the second stage, when the preparations were over, the CEO involved an external facilitator which had a lot of experience in moderating group decisions and who was also familiar with the Romanian business and people. During the presentations of each team, the facilitator challenged each alternative and asked the other managers to give their feedback. The facilitator also helped a lot to correctly define the opportunities and the real problems.

Basically it was understood that the actual organizational structure couldn't support the big increase of the company growth, and this was the major problem that determined the service manager to give up. After the real objective became very clear, the next step was identifying the factors limiting the development. The meeting went on with a brainstorming session during which other alternatives were also developed. After analyzing each scenario by pro and cons, evaluating them logically and rationally, the meeting ended with a decision that best served the interest of the company.

The chosen solution was to divide the current service department into three sub-departments - implementation and support for small and medium business; implementation and support for big projects; and the third one: back office support (including help desk, technical team, quality assurance and trainers) and to merge all of them together with the research and developments team under the operations department. Thus, from three independent departments - Sales, Service and R&D, each of them complaining of low collaboration in the detriment of the final customer, there remained only two - Sales and Operations, which were well organized inside in order to assure the scalability of the growing business and were managed each of them by a VP, who was also a partner in the company and served the same interest.

The Delphi model is a method frequently used in decisional groups. The logic of the methodology is gradual convergence towards a set of alternatives, judged through consensus, in order to ensure the optimum performance for that specific issue.

The Delphi model goes through a number of individual and group exploration cycles and ends with a group recommendation. ^[60]

One of the biggest advantages of the group decision was that at the end a consensus was reached. As everybody contributed to the final decision, it was easier to adopt it and everybody committed

⁶⁰ <http://www.biblioteca-digitala.ase.ro/biblioteca/carte2.asp?id=370&idb=>

to its implementation. Another important advantage was that the problem was identified through a common effort and everybody had the right to create a better alternative, something which hadn't been foreseen from the beginning.

The main disadvantage in the group decision-making process was the time required to reach a solution. The process had several steps and each step consumed a lot of time. In this case, the total decision-making process took about one month. Fortunately, the specific conditions of this problem allowed the CEO to allocate this amount of time to the decision making process.

Another disadvantage followed as a result of some team members' personal ambition. In order to increase their influence, they tried to dominate the meeting and to impose their opinion in order to get more power in the company. This fact was immediately identified and avoided by the CEO.

The presence of the external experts in this process also helped to avoid the phenomenon of 'groupthinking' and to encourage 'teamthinking', which is characterized as encouraging "diverging opinions, free expression of concerns and ideas, the awareness of the limits and risks", while in 'groupthinking' the teams try mainly to justify their various decisions instead of finding better solutions. ^[61] The experts involved everybody into the process by encouraging them to bring their own ideas and challenging them to confirmed or infirm the heard ideas.

After the decision was taken, during the implementation process, the new appointed Operations VP had contingency approaches according to the degree of the maturity of each team and manager. Looking at the Hersey and Blanchard's situational leadership model, the VP Operations used a delegating style for the team of small and medium business which were well established, a coordinating style for the big projects team, which was in the stage of being formed, a selling style for the R&D team which was its former team, and a participation style for the back office support team, which was in normative stage.

As a result the company succeeded in extending its activity and doubled its revenues in two years, as anticipated. Right now the resigning service manager is back in the company, managing a start up project using the same methodology well established in the Operations department.

After the decisional model gave results, the same method was chosen when deciding the best way to grow the business in the country. The main alternatives were either to develop a network of partners, or to open branches. A mixed solution was also considered, that of maintaining a small number of branches in the most important locations and to cover the rest of the country through partners.

The possible consequences of each proposal were analysed, creating a way of implementing the "chosen option" which can lead to optimal results but also one or more backing plans should the chosen solution fail.

The CEO acted as a facilitator in these meetings and paid a lot of attention to enhancing the communication between team members during the entire project. Even more, the CEO used his position as facilitator in order to involve every member in the process, to encourage them to bring their contribution and to make sure that nobody monopolizes the discussion.

In the third stage the group wrote a unified report including the teams' results. They agreed first on the main criteria that should be considered, assigned a weight to each criterion and finally scored each criterion for each scenario separately. The result was an overall score for each scenario.

⁶¹ Rujoiu, O. și Ferris, J. (2001). Implicațiile gândirii și deciziei de grup în organizații - *Sociologie Românească*, 1-4, 308-316

In the university centers with traditions, the firm developed work points attracting future specialists even during their studies, offering them an opportunity to have a productive stage during their masters degree.

Through actions of stimulating educational activity, the firm presents its solution by means of seminars and labs included in the optional curriculum, the students having access to the academic version of the applications of managing a firm resources, which allows them to get familiarized with the functionalities of these applications integrated in one system that offers a coherent and precise overview on a firm's situation.

Simulations of the main workflows in an organization on case tests, analysis and complex statistics models, are just few of the facilities offered by a modern informatic system necessary to a company in order to manage in the new economic climate.

In the centers where technology parks developed, the firm is present through centers of technology transfer and technological platforms acting as interfaces between the research structures and the companies, incubators for the research activity, in order to use the results of the research activity, to apply the advanced technologies from the economy and to increase the participation of the higher education institutes to the process of economical and social development through science and technology.

Using the "spin-off" ^[62] strategy allows to reduce the start-up costs and accelerate the growth processes.

In some cases, certain divisions of the working points were taken over by local firms having reached their maturity, leading to a partnership. The good knowledge of the technology constituted an advantage, and the implementation of a quality management system, a basic condition for collaboration, ensured the continuation of the activity on the projects under implementation, as well as attracting new projects.

By using outsourcing for certain activities, in order to avoid overloading the services activity, and by providing business license applications post-implementation services and warranty, the firm will reduce costs and implementation efforts with business. It was then evident to everyone that the right solution is to develop a national network of partners and to close the existing branches, continuing only with the business incubators activity.

After a decision was reached (to develop a network of partners) the CEO focused his energy in supporting his managers to implement it, especially the ones who were not very convinced of the final decision.

The Contingency Theory. V.H. Vroom si P.W. Yetton (1973) identified a few types of managerial styles. These involve harmonizing the capacities and skills of the leader with the way in which the subordinates understand and accomplish their tasks. ^[63]

The Vroom-Jago decision model is a rational model used by leaders to determine whether they should make a decision alone or involve a group, and to what extent the group should be involved. This method was first proposed by Vroom and Yetton in 1973 and was later modified by Vroom and Jago in 1988.

The 5 models of processes identified are:

(A1) Autocratic I The decision maker, use the information available to make the decision himself.

(A2) Autocratic II The leader request information from members of his team. They may or may not

⁶² Spin-off is defined by a company whose business lies in applying or using the results of the research development activity within a university or research institute

⁶³ Rujoiu, O. și Ferris, J. (2001). Implicațiile gândirii și deciziei de grup în organizații

know what are the information for. They neither define the situation, alternatives or final choice.

(C1) Consultative I The situation is explained to the individual members of the group but they do not get together as a group. The leader makes the final decision.

(C2) Consultative II There is group discussion where the leader explains the situation and gathers ideas and suggestions. Again, the leader is responsible for the final decision making. **(G2) Group II** The group as a whole make the decision. The leader presents the situation and the group defines alternatives and reaches a consensus decision. The leader acts more as a facilitator in this process and allows the group to agree on the final choice.

In some business situations it's better for a leader to be the decision maker for the group. In others, it's best for the group to have some input or even make the decision.

The Vroom-Jago decision model uses a series of seven questions, asked in order, to determine which processes to use: [64]

1. Is high quality important here or is a good solution absolutely critical?
2. As the leader, do you have enough information of your own to make a good decision?
3. Is the problem structured in that it is clearly defined, organized and has recognized solutions?
4. Do the members of the group have to accept this decision for it to work?
5. If you make this decision yourself, are you sure the group will accept it?
6. Are the group members aligned with the same goals that you are trying to achieve?
7. Is disagreement likely among group members in reaching a decision?

In this case, it would not be acceptable to have more equal alternatives, the answer to the first question is 'yes', to the second is 'no', then 'yes' again for the third. As for question 4, they will have to accept the decision, so the upper limb is chosen, for 'yes'. Then 'no' again, because it's obvious they will not accept the decision directly, but the 6th answer is positive, and finally 'yes' again for seventh question. This points the decision to G2, so the group must be involved in order to make a good decision.

The application of the decisional algorithm is exemplified in the figure below:

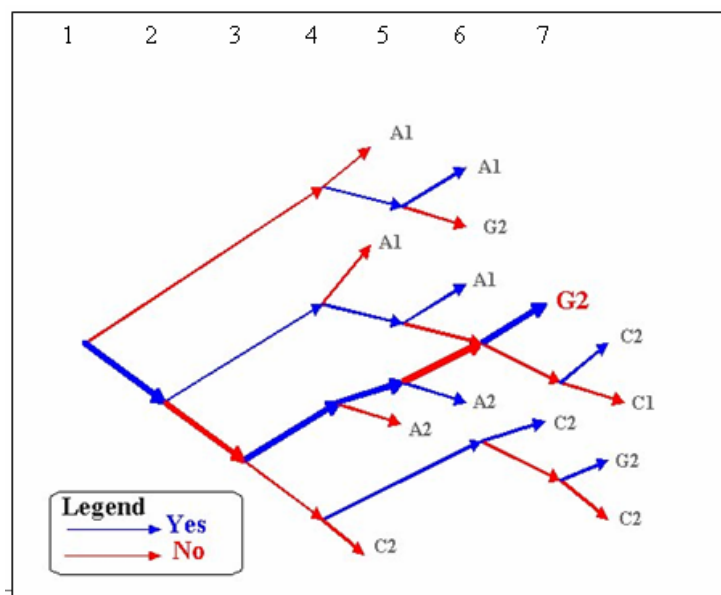


Figure 2. The Vroom-Jago decision tree based on the seven questions set in order to determine one of the five decisional situations

⁶⁴ <http://www.decision-making-confidence.com/vroom-jago-decision-model.html>

Looking at the Vroom-Jago leadership model, we see that the CEO had a participative decision style. By studying the decision tree, we see that it was a right approach, as the quality of the decision was very important to the business, the managers' commitment to decision-taking was crucial, the information of each department manager (especially the impact of each scenario on the department organization and procedures) were relevant to the final decision, the problem was well structured, not all managers would have committed to a decision taken by the CEO alone, the managers shared the company goal of expanding in the country in the most profitable way, even the managers who had different opinions about the chosen solution.

In implementing the decision, the CEO had two different approaches, depending on each manager's confidence in the final decision.

"Team work greatly leads towards the increase of the group members' commitment, attachment and trust in their decision". (*Situational Leadership Theory*)^[65]

Considering the Hersey and Blanchard's situational leadership model, we see that for the group of managers that were confident in the decision, the CEO had a delegating style, while for the managers that had doubts about the correct solution he had a participating style. In all the cases, the CEO was sure that his managers had the ability to put the decision into practice. The success of his method was due to his ability of combining a decisional model with his own intuition.

4. Pros and Cons Arguments

A model of improving decision-taking starts from the premise of an existing best solution and is based on analyzing each option and estimating future consequences. But out of the theoretical model field, it is practically impossible to take into account all the aspects and interactions among the factors, or to accurately predict all the future evolutions and the context they would take place in. The tendency to perfectionism is often an important factor in delaying decision-taking. The criteria can also be subjective or difficult to evaluate and compare, as the result should be as objective as possible. The success of the decisional process depends mainly on the number and quality of the variants taken into discussion. These variants are frequently the result of the creativity and experience of certain groups of people familiar with the analyzed issue.

5. Conclusions

In the current economic context, characterized by competitiveness and rapid evolution of demand, the optimisation of the decisional process depends on the adaptation speed of the informatics systems to this evolution, in order to be able to provide real-time information and to help decision-taking in useful time.

The competitiveness of the provided services in the context of higher demands on the IT market and the innovative character of the provided products following the technological evolution represents the priority of an IT company.

On the other hand, the development strategies, the decisional processes the firms, companies or organizations rely on, are equally important. The freedom of choice is ours, but the freedom of consequences is not. One more reason to make one's choices carefully and with responsibility.

Acknowledgements:

The work of Mioara CHIRITA was supported by Project SOP HRD - EFICIENT 61445/2009

⁶⁵ Hersey, P. and Blanchard, K. H. (1977). *Management of Organizational Behavior 3rd Edition- Utilizing Human Resources*. New Jersey/Prentice Hall.

References

1. Hersey, P. and Blanchard, K. H. (1977). *Management of Organizational Behavior 3rd Edition– Utilizing Human Resources*. New Jersey/Prentice Hall.
2. <http://www.decision-making-confidence.com/rational-decision-making-models.html>
3. <http://www.decision-making-confidence.com/vroom-jago-decision-model.html>
4. Rujoiu, O. și Ferris, J. (2001). *Implicațiile gândirii și deciziei de grup în organizații*
5. *Sociologie Românească*, 1-4, 308-316
6. Deaconu, A.; Podgoreanu, S.; Rasca, L. *Factorul uman si performantele organizatiei, Cap. V* <http://www.biblioteca-digitala.ase.ro/biblioteca/carte2.asp?id=370&idb=>